

REMARKS

Claims 1-14 and 17-18 are currently pending. Claims 17 and 18 have been amended, and a marked-up version of the amended claims is submitted herewith as Appendix E. New claims 19-34 have been added, and a marked up version can also be found in Appendix E. Thus, after entry of this amendment, claims 1-14 and 17-34 will be pending. A clean version of the pending claims is submitted herewith as Appendix F.

Claim 17 has been amended to correct an obvious typographical error, and not for reasons related to patentability.

Claim 18 has been amended to recite the ATCC accession number of the 5G1.1 antibody, as suggested by the Examiner in the Advisory Action dated 01 August 2001. Claim 18, as amended, now recites the method of Claim 17, wherein said monoclonal antibody is 5G1.1 (ATCC Accession No. HB-11625). No new matter has been added by way of this amendment for which support is found in the specification at, *e.g.*, page 60, and Applicants state their belief that the scope of Claim 18 is unchanged.

New independent claim 19 has been added to recite a method for the treatment of established joint inflammation in a patient in need thereof comprising administering to the patient an effective anti-inflammatory amount of a composition comprising a purified antibody, which binds the alpha chain of C5. No new matter has been added by way of this amendment, as support can be found in the specification on pages 56 and 59-60, as amended herein (see discussion below). New claims 19-34 depend, either directly or indirectly, from independent claim 19 and correspond to claims 2-14, 17 and 18, respectively.

Marked-up copies of the amended sections of the specification are submitted herewith as Appendices A and C. Clean copies of the amended sections are submitted herewith as Appendices B and D, respectively.

Applicants have amended the specification to insert text relating to the ability of the 5G1.1 antibody to bind to both the alpha and beta chains of human C5 protein, as determined by immunoblot assay. After entry of this amendment, the text of Example 8 of the instant application exactly corresponds to the text of Example 7 in Wang *et al.* (U.S. Patent No. 6,074,642 (hereafter the '642 patent), columns 18-19, submitted herewith as Appendix G for the Examiner's convenience). The Wang *et al.* application (U.S. Serial No. 08/236,208), which evolved into the '642 patent, was incorporated into the specification of the instant application by reference in its entirety (see page 6, lines 6-7 and page 60, lines 11-16). The Sims *et al.* patent, which is referenced in the inserted section in Appendix A, was previously referenced in the instant application at page 6, line 8. Thus, no new matter has been added by way of this amendment.

I. Rejection Under 35 U.S.C. § 112, Second Paragraph

Claim 18 stands rejected under 35 U.S.C. § 112, second paragraph, for the recitation of "5G1.1" because 5G1.1 is a laboratory designation (04/05/01 Office Action, paragraph 9C).

This ground of rejection is respectfully traversed.

Applicants have described the preparation of the hybridoma 5G1.1 (Specification, Example 8, pages 56-60) and have further deposited the hybridoma 5G1.1 with the American Type Culture Collection (Specification, page 60). One skilled in the art would understand that

the 5G1.1 antibodies are derived from the deposited 5G1.1 hybridoma using standard laboratory techniques. Thus, Applicants respectfully submit that the recitation of "5G1.1" in the claim is not indefinite and that this ground of rejection may be properly withdrawn.

However, solely in a effort to advance prosecution of this application, Applicants have amended claim 18 to recite the ATCC accession numbers in the claims, as suggested by the Examiner. Claim 18, as amended, now recites the method of Claim 18, wherein said monoclonal antibody is 5G1.1 (ATCC Accession No. HB-11625). No new matter has been added by way of this amendment for which support is found in the specification at, *e.g.*, page 60, and Applicants state their belief that the scope of Claim 18 is unchanged.

Applicants submit that claim 1, as amended, satisfies the requirements of 35 C.F.R. § 112, second paragraph. Likewise, claims 2-14 and 17-18, which are directly or indirectly dependant on claim 1, as amended, and thus contain all the limitations thereof, also satisfy the requirements of 35 C.F.R. § 112, second paragraph.

Accordingly, Applicants respectfully request that this rejection be reconsidered and withdrawn.

## II. Rejection Under 35 U.S.C. 103(a)

Claims 1-14 and 17-18 stand rejected under 35 U.S.C. § 103 as allegedly being unpatentable over a variety of references. These rejections will be addressed individually below.

- a. Sindelar et al., Auda et al., Wurzner et al., and Montz et al.

Claims 1-14 and 17-18 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Sindelar *et al.* (U.S. Patent No. 5,173,499) in view of Auda *et al.* (Rheumatol. Int. 10:185-18 (1990)), Wurzner *et al.* (Complement Inflamm. 8:328-40 (1991)) and Montz *et al.* (Cell. Immunol. 127:337-51 (1990)) (04/06/01 Office Action, paragraph 11).

This ground of rejection is respectfully traversed.

The Examiner states that Sindelar *et al.* teaches methods for treating established joint inflammation comprising the administration of an effective amount of a C5 blocker. Auda *et al.* is cited to teach the measurement of complement activation products in patients suffering chronic rheumatic diseases to predict patient clinical status. Auda *et al.* is also cited to teach monitoring C5b-9 levels in patients to provide a more sensitive indicator of patient status. Wurzner *et al.* is cited to teach the inhibition of terminal C components by monoclonal antibodies specific for C5. Montz *et al.* and Wurzner *et al.* are further cited to teach C5 inhibitors, which do not affect the early C components. The Examiner asserts that one of ordinary skill in the art would have been motivated to modify the teachings of Sindelar *et al.* with the teachings of Auda *et al.*, Montz *et al.* and Wurzner *et al.* to use C5 inhibitory antibodies to inhibit inflammatory joint disease. The Examiner contends that the motivation to combine the references is in the use of analogous compounds to those taught in Sindelar *et al.* for the inhibition of C5 activity with a reasonable expectation of success, although the Examiner does not appear to contend that the asserted motivation may be found within the cited references themselves. (*See* 03/31/96 Office Action).

"To establish a *prima facie* case of obviousness based on a combination of the content of various references, there must be some teaching, suggestion or motivation in the prior art to make the specific combination that was made by the applicant." *In re Dance*, 160 F.3d 1339,

1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); *see also In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (“Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.”); *In re Mayne*, 104 F.3d 1339, 1342, 41 USPQ2d 1451, 1454 (Fed. Cir. 1997) (“When relying on numerous references or a modification of prior art, it is incumbent upon the examiner to identify some suggestion to combine references or make the modification.”); *In re Paulsen*, 30 F.3d 1475, 1482, 31 USPQ2d 1671, 1676 (Fed. Cir. 1994) (“In reviewing the Board’s obviousness conclusions, we have been guided by the well-settled principles that the claimed invention must be considered as a whole, *multiple cited prior art references must suggest the desirability of being combined*, and the references must be viewed without the benefit of hindsight afforded by the disclosure”) (emphasis added).

Applicants respectfully direct the Examiner’s attention to the Declaration of Dr. Yi Wang pursuant to 37 C.F.R. § 1.132, which was submitted 12 September 1996. Dr. Wang declares that it was not known that the method claimed in the instant application would be successful in treating established joint inflammation. Indeed, published references taught away from the present invention, *i.e.*, they taught that animals carrying a genetic defect, which caused them to have no C5, still developed established joint inflammation (Wang Declaration, paragraph 4, and references cited therein). As Dr. Wang pointed out in his Declaration, based on the teaching of these prior art references, one skilled in the art would have expected that inhibiting C5 in mice would fail to treat established joint inflammation; thus, it was wholly unexpected that administering antibodies specific against C5 to mice would treat established joint inflammation,

as was surprisingly discovered by Dr. Wang and his co-inventors (Wang Declaration, paragraph 4).

The Sindelar *et al.* patent is directed to chemically synthesized non-protein organic compounds, which are substituted dihydrobenzofurans, spirobenzofuran-2(3H)-cycloalkanes, and their open chain intermediates, for the inhibition and/or suppression of immune activity (Sindelar *et al.*, abstract). As the Examiner implicitly acknowledged in withdrawing the prior rejection under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over the Sindelar *et al.* reference, Sindelar *et al.* does not teach or suggest methods for the treatment of established joint inflammation using a composition comprising a purified antibody specific against C5. Further, with respect to newly added claims 19-34, Sindelar *et al.* also does not teach or suggest methods for the treatment of established joint inflammation using a composition comprising a purified antibody, which binds the alpha chain of C5.

In an attempt to cure the deficiencies of Sindelar *et al.*, the Examiner cites Wurzner *et al.*, which teaches the production of two monoclonal antibodies, allegedly specific for C5.

Wurzner *et al.* does nothing to correct the deficiencies of Sindelar *et al.* As described above, Sindelar *et al.* does not teach or suggest methods for the treatment of established joint inflammation using a composition comprising a purified antibody specific against C5. Similarly, Wurzner *et al.* does not teach or suggest, and is not enabling for, the use of antibodies specific against C5 for the treatment of established joint inflammation. Wurzner *et al.* teaches the production of two monoclonal antibodies. Based on *in vitro* testing, these antibodies are stated to be specific for C5. Wurzner *et al.* does not describe any *in vivo* studies to show that the

antibodies would be effective *in vivo*, much less effective for the treatment of established joint inflammation, as was shown of the antibodies used in the instant application (see e.g., Examples 1 and 2).

Moreover, the prior art references fail to provide the requisite motivation to substitute the C5 blockers of the Sindelar reference with Wurzner's monoclonal antibodies directed against C5. At best, the Wurzner reference only speculates that such C5 antibodies may be useful to arrest the complement cascade, which may be beneficial for some diseases. In fact, while the authors speculate that the C5 antibodies may be useful to arrest the complementary cascade, they fail to teach or suggest the stage at which to arrest the complement cascade to achieve clinical usefulness:

Arresting the complement cascade at an earlier stage may not be the most clinically useful point to prevent TCC formation because both activation pathways as well as cleavage of C5 by injured tissue-related enzymes...or C5 activation by oxygen radicals...would have to be blocked. Arresting the complement cascade at a later stage, as shown with anti-C8 mabs..., will neither inhibit membrane insertion of the terminal complement complex nor C5a liberation. (Wurzner at 337; citations omitted).

Wurzner's uncertainty and speculation do not provide the requisite motivation to substitute the Wurzner monoclonal antibodies for the Sindelar C5 blockers. Mere conjecture is not the appropriate standard for obviousness. *Datascope Corp. v. SMEC, Inc.*, 224 U.S.P.Q. 694, 698 (D.N.J. 1984), *aff'd in part & rev'd in part* 776 F.2d 320, 227 U.S.P.Q. 838 (Fed. Cir. 1985) ("Anticipation cannot be predicated on teachings in a reference that are vague or based on conjecture").

Similarly, Wurzner *et al.*, either alone in combination with Sindelar *et al.*, does not anticipate newly added, independent claim 19 (or dependent claims 20-34), which recites a

method for the treatment of established joint inflammation in a patient in need thereof comprising administering to the patient an effective anti-inflammatory amount of a composition comprising a purified antibody, which binds the alpha chain of C5. Specifically, Wurzner *et al.* discusses the production of two monoclonal antibodies, N19-8 and N20-9, which are specific against the beta chain of C5 (see Wurzner *et al.*, page 337, left column, lines 4-6 ). The specific use of these C5 beta chain-specific antibodies to treat joint inflammation is not taught or suggested. Applicants submit that the effective use of a composition comprising a purified antibody, which binds the alpha chain of C5, in a method for the treatment of established joint inflammation, was not known in, much less suggested by, the prior art including Wurzner *et al.*, and thus that Wurzner *et al.* does not supply the deficiencies of Sindelar *et al.* Thus, newly added claims 19-34 also distinguish over Wurzner *et al.*, alone or in combination with any other reference of record.

In a further attempt to cure the deficiencies of Sindelar *et al.*, the Examiner cites Montz *et al.* However, the Montz *et al.* reference does nothing to correct the deficiencies of Sindelar *et al.* and/or Wurzner *et al.* Montz *et al.* discusses experiments to determine the potential role of endogenously synthesized C5 and subsequently generated C5a in *in vitro* autologous T cell stimulation. Montz *et al.* is directed to analyzing the inhibitory effect of anti-C5a against autologous T cell proliferative responses *in vitro*. Montz *et al.* does not teach or suggest an *in vivo* method for the treatment of established joint inflammation in a patient in need thereof comprising administering to the patient an effective anti-inflammatory amount of a composition comprising a purified antibody specific against C5. Similarly, Montz *et al.* does not teach or suggest an *in vivo* method for the treatment of established joint inflammation in a patient in need thereof comprising administering to the patient an effective anti-inflammatory amount of a

composition comprising a purified antibody, which binds the alpha chain of C5, as required by newly added claims 19-34. Therefore, neither Wurzner *et al.* nor Montz teaches or suggests the use of anti-C5 antibodies to treat established joint inflammation in a patient, and thus neither supplies the deficiencies of Sindelar *et al.*, alone or in combination.

The Examiner cites Auda *et al.* which, respectfully, does nothing to remedy the deficiencies of Sindelar *et al.*, Wurzner *et al.*, and Montz *et al.* Auda *et al.* merely describes measuring complement activation products in patients. While it is an interesting fact that C5b-9 complex levels were increased in patients with chronic rheumatic diseases, as discussed above, mouse studies in which C5 was completely absent due to a genetic defect continued to develop established joint inflammation (Wang Declaration). In response, the Examiner asserts that the Declaration is found unpersuasive because Auda *et al.* "clearly indicates the involvement of complement in rheumatoid arthritis and the recruitment of PML." However, in addition to showing that C5b-9 complex levels were elevated in patients with chronic rheumatic diseases, Auda *et al.* also showed that early complement component complexes (in addition to the late complement component C5b-9 complex) were also increased in patients with chronic rheumatic diseases. In fact, C1s:C1-inh, C3bP and C5b-9 complexes were each elevated in all patients (see entire document).

Moreover, while Auda *et al.* suggests that "monitoring the levels of complement activation products may provide additional information and allow predictions of clinical status," the authors do not suggest which of the many complement component complexes would be most effective. Similarly, Auda *et al.* does not suggest which chain of the complement component would be most effective (*e.g.* the alpha chain of C5), as required by newly added claims 19-34.

The authors do note that the predictive value of a test utilizing C5b9 has been shown in determining the onset of adult respiratory distress syndrome (which is not a disease of established joint inflammation), which allegedly suggests C5b9 may provide a more sensitive indicator than measurements of CH50, C4a, C3a or C5a" (page 188, right column, second full paragraph). However, once again, there is no indication of which of the many complement components found in elevated levels in the blood or patients with chronic rheumatic diseases is most important. There is similarly no indication of the importance of the alpha chain of C5. There is also not any suggestion in Auda *et al.* that antibodies specific against C5 would be useful in treating patients with established chronic joint inflammation, as required by newly added claims 19-34. Thus, Auda *et al.* does not teach or suggest the claimed method of treating established joint inflammation by administering to a patient either a composition comprising a purified antibody specific against C5, or a composition comprising a purified antibody which binds to the alpha chain of C5. Further, Auda *et al.* does not provide any motivation to combine the references cited by the Examiner.

It is not sufficient that the prior art *could be* modified to produce the claimed invention. Rather, the modification is non-obvious unless the prior art suggests the desirability thereof. *In re Laskowski*, 10 USPQ2d 1397 (Fed. Cir. 1989). Further, the invention as a whole must be considered when determining obviousness, and it is improper to consider only the obviousness of any substitution or modification. *Hybritech v. Monoclonal Antibodies, Inc.*, 231 USPQ 81 (Fed. Cir. 1986). Indeed, modification of the teachings of a prior art reference is not established by the teachings of a second prior art reference "*unless the prior art suggests the desirability of the modification.*" *In re Fritch*, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992) (emphasis added).

Applicants respectfully submit that the required motivation to combine the Sindelar *et al.*, Auda *et al.*, Wurzner *et al.*, and Montz *et al.* references is completely lacking. Not one of these references, either alone or in combination with the other references, discloses or suggests to the ordinarily skilled person the desirability of the claimed invention.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the instant rejection.

b. Sindelar *et al.*, Auda *et al.*, Wurzner *et al.*, Montz *et al.*, and Rollins *et al.*

Claims 1-14 and 17-18 also stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Sindelar *et al.*, in view of Auda *et al.*, Wurzner *et al.* and Montz *et al.* in further view of Rollins *et al.* (U.S. Patent No. 5,853,722) (04/05/01 Office Action, paragraph 11).

Applicants respectfully traverse this ground of rejection.

The Examiner asserts that Rollins *et al.* is added to allegedly provide further teachings and evidence that C5-specific antibodies had the property of inhibiting complement inflammatory conditions in humans at the time the invention was made.

The Sindelar *et al.*, Auda *et al.*, Wurzner *et al.*, and Montz *et al.* references are discussed above. Rollins does not remedy the deficiencies of the combination of Sindelar *et al.* in view of Auda *et al.*, Wurzner *et al.*, and Montz *et al.*. Rollins teaches the use of anti-C5 antibodies to block the generation of activated complement components C5a and C5b following extracorporeal circulation during cardiopulmonary bypass. Indeed, Rollins specifically teaches that “[m]ore generally, the invention relates to the use of anti-C5 antibodies in any procedure

which involves circulating the patient's blood from a blood vessel of the patient, through a conduit, and back to a blood vessel of the patient" wherein the "anti-C5 antibody is used to reduce at least one of complement activation, platelet activation, leukocyte activation, or platelet-leukocyte adhesion resulting from the circulation of the patient's blood through such a conduit" (Rollins, columns 10-11). In contrast, the methods of treating established joint inflammation encompassed by the claimed invention are directed to administering, to a patient, an effective anti-inflammatory amount of a composition comprising a purified antibody specific against C5.

Thus, Rollins does not supply the deficiencies of Sindelar *et al.*, Auda *et al.*, Wurzner *et al.*, and Montz *et al.*. Further, the motivation to combine the references is lacking, because none of the prior art references suggests the desirability of modification of the references.

Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

c. Sindelar et al., Auda et al., Wurzner et al., Montz et al., Rollins et al., and Wang et al.

Finally, claims 1-14 and 17-18 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Sindelar *et al.* in view of Auda *et al.*, Wurzner *et al.* and Montz *et al.* in further view of Rollins *et al.* and Wang *et al.* (U.S. Patent No. 6,074,642) (04/05/01 Office Action, paragraph 11).

Applicants respectfully traverse the rejection, and respectfully submit that U.S. Patent No. 6,074,642 to Wang *et al.* is not properly cited against the present claims. 35 USC § 103(c).

§ 103(c) recites:

(c) Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Applicants respectfully submit that U.S. Patent No. 6,074,642 to Wang *et al.* is assigned to Alexion Pharmaceuticals, Inc. pursuant to an Assignment recorded in the U.S. Patent Office on 29 June 1994, at Reel 007038, Frame 0416 (submitted herewith as Appendix H); and that the present application is assigned to Alexion Pharmaceuticals, Inc. (see Yang Declaration, page 2, line 1). U.S. Patent No. 6,074,642 to Wang *et al.* and the present application were, at the time the invention was made, owned by Alexion Pharmaceuticals, Inc. and were subject to an obligation of assignment to Alexion Pharmaceuticals, Inc.

In view thereof, Applicants respectfully submit that U.S. Patent No. 6,074,642 to Wang *et al.* is not a proper reference under 35 USC § 103(c) against the claims of the present application, and respectfully request that the rejection over U.S. Patent No. 6,074,642 to Wang *et al.* be withdrawn.

Since the pending claims are rejected over the combination of Sindelar *et al.*, Auda *et al.*, Wurzner *et al.*, Montz *et al.* Rollins *et al.* and Wang *et al.*, and since Wang *et al.* is not a proper reference under 35 USC § 103(c), Applicants respectfully submit that this ground of rejection under 35 USC § 103 must be withdrawn.

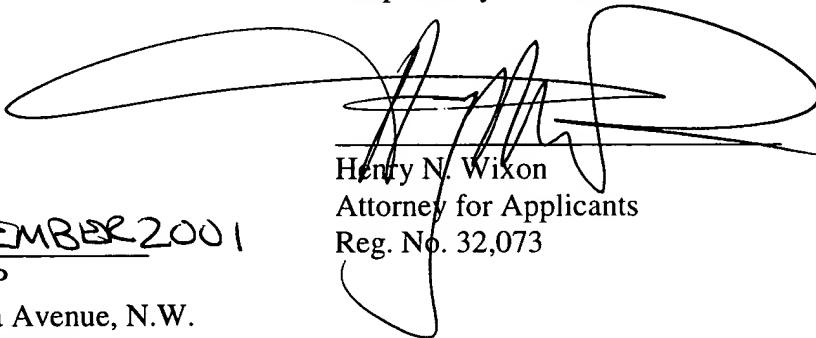
Applicants submit that claims 1-14 and 17-18, as well as newly added claims 19-34, satisfy the requirements of 35 C.F.R. § 103. Accordingly, withdrawal of this ground of rejection is believed proper, and is respectfully requested.

III. Conclusion

In view of the foregoing remarks and amendments, Applicants believe that the claims, as amended, are now in condition for immediate allowance. If the Examiner believes that an interview would assist in advancing the prosecution of the application, he is invited to call the undersigned at the number set forth below.

If there are any fees due in connection with the filing of this response and not otherwise authorized, please charge the fees to Deposit Account No. 08-0219. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is hereby petitioned and the fee should also be charged to Deposit Account No. 08-0219.

Respectfully submitted,



Henry N. Wixon  
Attorney for Applicants  
Reg. No. 32,073

Date: 5 NOVEMBER 2001  
Hale and Dorr LLP  
1455 Pennsylvania Avenue, N.W.  
Washington, DC 20004  
(202) 942-8459 – Telephone  
(202) 942-8484 – Facsimile

## **APPENDIX A**

### **INSERTED SECTION 1 – SPECIFICATION – MARKED-UP VERSION**

On page 56, please delete the paragraph spanning lines 19-20 and replace with the following paragraph:

A C5 blocker [mAb] monoclonal antibody suitable for use in the practice of the present invention and having the unique ability to bind to both the alpha and beta chains of the human C5 protein was prepared in accordance with the teachings of Sims, et al., U.S. Pat. No. 5,135,916, as follows.

## **APPENDIX C**

### **INSERTED SECTION 2 – SPECIFICATION – MARKED-UP VERSION**

On page 59, please delete the paragraph spanning page 59, line 19, through page 60, line 3, and replace with the following two paragraphs:

The supernatant from a hybridoma designated as 5G1.1 tested positive by ELISA and substantially reduced the cell-lysing ability of complement present in normal human blood in the chicken erythrocyte assay. Further analyses revealed that the 5G1.1 antibody has two surprising properties: 1) it reduces the cell-lysing ability of complement present in normal blood so efficiently that, even when present at roughly one-half the molar concentration of human C5 in the hemolytic assay, it can almost completely neutralize serum hemolytic activity; and 2) it binds to both the alpha and beta chains of the human C5 protein.

The surprising and unanticipated ability of the monoclonal antibody produced by hybridoma 5G1.1 (the 5G1.1 mAb) to bind to both the alpha and beta chains of the human C5 protein was revealed when immunoblot analysis was undertaken to further characterize the 5G1.1 mAb. Human C5 (Quidel Corporation, San Diego, Calif., Catalog No. A403) was subjected to polyacrylamide

gel electrophoresis under reducing conditions, transferred to a nitrocellulose membrane, and probed with the 5G1.1 mAb as a purified IgG preparation. Two bands were immunoreactive with the 5G1.1 mAb at apparent molecular weights corresponding to those of the alpha and beta chains of the human C5 protein.

## **APPENDIX E**

### **AMENDED CLAIMS 17-18 AND NEW CLAIMS 19-34 – MARKED-UP VERSION**

Please amend claims 17 and 18 as follows:

17. (Amended) The method of [claim] Claim 1, wherein said antibody is a monoclonal antibody.
18. (Amended) The method of [claim 18] Claim 17, wherein said monoclonal antibody is 5G1.1 (ATCC Accession No. HB-11625).

Please add new claims 19-34 as follows:

- 19. (New) A method for the treatment of established joint inflammation in a patient in need thereof comprising administering to the patient an effective anti-inflammatory amount of a composition comprising a purified antibody, which binds the alpha chain of C5.
20. (New) The method of Claim 19 wherein the composition is administered in an amount effective to inhibit the cell-lysing capability of complement present in a blood-derived fluid of the patient
21. (New) The method of Claim 20 wherein the blood-derived fluid is serum.

22. (New) The method of Claim 19 wherein the composition is administered in an amount effective to reduce the level of soluble C5b-9 present in a blood-derived fluid of the patient after activation of complement in that fluid.

23. (New) The method of Claim 22 wherein the blood-derived fluid is serum.

24. (New) The method of Claim 19 wherein the composition is administered in an amount effective to reduce the level of C5a present in a blood-derived fluid of the patient after activation of complement in that fluid.

25. (New) The method of Claim 24 wherein the blood-derived fluid is serum.

26. (New) The method of Claim 19 wherein the composition is administered in an amount effective to reduce the cell-lysing ability of complement present in the synovial fluid of an inflamed joint of the patient by at least 10%.

27. (New) The method of Claim 19 wherein the composition is administered in an amount effective to reduce the level of soluble C5b-9 present in the synovial fluid of an inflamed joint of the patient by at least 10%.

28. (New) The method of Claim 19 wherein the composition is administered in an amount effective to reduce the level of C5a present in the synovial fluid of an inflamed joint of the patient by at least 10%.

29. (New) The method of Claim 19 comprising the further step, after the administration of the composition, of determining the C5a level and/or the C5b level in

the synovial fluid of an inflamed joint of the patient so as to monitor the course of the patient's response to the administration of the composition.

30. (New) The method of Claim 29 wherein the C5a level is determined by an immunoassay or a chemotaxis assay.
31. (New) The method of Claim 29 wherein the C5b level is determined by measuring the level of soluble C5b-9 in the synovial fluid or by measuring the cell-lysing ability of complement present in the synovial fluid.
32. (New) The method of Claim 19 wherein the composition does not interfere with the cleavage of complement component C3 in the patient's serum into C3a and C3b.
33. (New) The method of Claim 19, wherein said antibody is a monoclonal antibody.
34. (New) The method of Claim 33, wherein said monoclonal antibody is 5G1.1 (ATCC Accession No. HB-11625).--